

Government meteorological observations in Nevada date back to 1870 when the National Weather Service was created within the U.S. Army Signal Corps. These military meteorologists were stationed in Nevada until 1890 when the national weather program was transferred to the U.S. Department of Agriculture and the government weather observers became civilians.

In Carson City, a local jeweler named Charles Friend had a weather observatory located a block from the Nevada State Capitol. His observations date from 1880 and apparently meteorology was a hobby of Friend's. In 1883 the Nevada State Legislature passed "An Act to procure meteorological reports for the State of Nevada, and to provide for the payment of the same." In this law, the Secretary of State was directed to contract with Charles W. Friend to purchase the monthly weather reports for 1883 and 1884; the total sum appropriated was \$300.

In February of 1885 Friend submitted his reports to Secretary of State John M. Dornier, and stated in a preface that in addition to his monthly meteorological reports he was submitting his complete data from 1880 to 1885. Friend's first report included a description of his Carson City observatory and of the types of weather instruments located at the observatory.

Charles Friend was successful in expanding weather observations in Nevada through an act passed by the 1887 Nevada Legislature that established a Nevada State Weather Service. The opening section of this act stated:

The establishment of a weather service station being necessary to secure as complete a history of the weather of Nevada as possible, in order to furnish trustworthy material for a study of its climate, to acquaint the people of the State and non-residents with the physical conditions of every locality, based upon reliable climatic data, thereby greatly benefiting agricultural, commercial, manufacturing and municipal interests, there is hereby established at Carson City, in this State, a central weather station, to be under the supervision of a competent Director, to be appointed as hereinafter provided.

The act then allowed for the appointment of the Director by the Governor of Nevada, and directed the Director to establish volunteer weather stations throughout the state. He would receive reports from these volunteers and compile and print a monthly weather report. This report would be sent to all colleges, high schools, hospitals, public libraries, agricultural societies and newspapers.

The Director, according to the act, would compile an annual report and receive a salary of \$600 a year. He would provide the equipment for the volunteer stations, and apply to the United States Central Signal Office in Washington, D.C., to have the volunteer stations recognized by the U.S. Government. The law stated that the County Auditors would be the volunteer observers for each county. Five hundred dollars was appropriated for the purchase of instruments for the volunteer stations. Finally the act said that all instruments purchased with State funds and all charts, maps, diagrams and tabulated forms made by the Director would be the property of the State.

Charles Friend was appointed as Director of the Nevada State Weather Service by Governor C.C. Stevenson and filed his first annual report in January 1889. Friend stated that the first weather stations were established around the state in September 1887 and the first monthly weather reviews began in February 1888. He also wrote that:

Many difficulties beset the work of organizing the State Weather Service, and the outlook at first was not at all encouraging, but through determined effort and a deal of labor the service has assumed proportions and given promises of success far exceeding the most sanguine expectations of its friends and promoters. A very considerable degree of interest has been aroused among the people in various parts of the State in the study of our climate, and a disposition is manifested to make such study profitable by making intelligent application of the knowledge thus acquired.

Friend wrote:

The Weather Service would help bring prosperity to Nevada's agricultural concerns and the weather stations around the State will enable the Signal Corps to accurately forecast the weather and give to every county the Government standard of temperature, rainfall, humidity, etc., which is useful information. It will educate the people in the physical and climatic conditions of the county in which they live. It will put within reach of the local agricultural societies means of accurate observations which, in the

course of years, must be valuable to any locality in the object of their pursuits. It will form reliable records in legal cases. It is invaluable to the State Bureau of Immigration, as it will invite immigration, by publishing the reports and showing the climate of the State. It will aid the medical profession in the study of diseases. It will show to the whole United States the large amount of water, by actual figures, that there is in the State, and be a basis for Congress and our Legislature to convert thousands of acres of otherwise waste lands into beautiful and profitable farms and gardens, and it will show thousands of people who are dying in various humid parts of our country where they can prolong their lives and, in many cases, live to a good age.

Meteorologists assigned by the U.S. Army Signal Corps until 1890 assisted the Nevada State Weather Service when the National Weather Service was transferred to the Department of Agriculture. After 1890 this Department assigned personnel to assist Charles Friend. Beginning with the annual report covering the year 1892, report covers state "C.W. Friend, Director and Ford A. Carpenter, USWB, Asst. Director." Subtitles continue, "In Co-operation with the U.S. Department of Agriculture, Weather Bureau."

During the time of the Nevada State Weather Service its reporting emphasized the importance of weather to the growing of crops. Every monthly and annual report had sections for crop reviews. Friend also mentioned any unusual weather phenomena such as pagonip, earthquakes, weather velocity, snowfall etc. Weather forecasts were telegraphed to Reno and Carson City on a daily basis. In Reno, these forecasts were displayed on bulletin boards at the Post Office and at the University. In Carson City, signal flags were used. These flags were flown from the dome of the State Capitol.

The Nevada State Weather Service lasted through 1904; the last report of Charles Friend was dated March 1, 1905. He died shortly thereafter and even though the law authorizing the State Weather Service stayed on the statute books until 1912 there was never another director appointed. In 1907 a bill was introduced in the Nevada Legislature to purchase the instruments of Charles Friend. This bill did not pass; however two years later another bill did pass but was vetoed by Governor John Sparks.

After 1905 the weather stations around the state reported their observations to the National Weather Service as all weather come under the federal government and the Department of Agriculture. That same year the National Weather Bureau moved its station from Carson City to Reno. The Reno station was the main weather station for Nevada until 1942.

In 1940 the National Weather Service was moved from the Department of Agriculture to the Department of Commerce. Weather stations throughout the country were consolidated and in 1942 Nevada weather stations sent in their observations to a regional section office in Salt Lake City. The monthly weather summaries continued to be produced by these regional offices.

In 1954 the National Weather Bureau Climatological Service Division, headed by Dr. Helmut Landsberg, discontinued the Section Centers and created the State Climatologist Program. These climatologists were paid by the Federal Government and usually were either associated with the National Weather Bureau or with a State University. From 1954 through 1957 Nevada seems to have had no State Climatologist - the monthly weather summaries were written for Nevada by weather employees in San Francisco.

In January 1958 the first Nevada State Climatologist made a report. He was Merle J. Brown of Salt Lake City. Utah residents remained the State Climatologist for Nevada until 1969. In February 1969 Clarence M. Sakamoto, a professor at the University of Nevada-Reno in the Plant, Soil and Water Science Division signed the weather summaries as State Climatologist.

In 1970 the National Oceanic and Atmospheric Administration (NOAA) was created within the Department of Commerce and the National Weather Service was placed within NOAA. On April 16, 1973 the State Climatology Program was terminated and NOAA administrator Robert M. White sent a letter to all state governors asking that the governors establish their own state climate program.

Even though the Nevada State Climatologist was no longer being paid by the federal government and yet not authorized by the State, weather observations continued and monthly summaries were written. John James, a professor of Geography at the University of Nevada-Reno, became the State Climatologist in the Summer of 1984.

Many other states established state climate programs but Nevada did not until 1985. In that year the office of State Climatologist was established. The law stated that the appointment would be made by the director of the State Department of Conservation and Natural Resources with the approval of the National Climatic Data Center of NOAA, the Western Regional Director of the National Weather Service, and an officer of the University of Nevada system. The law also stated that the University of Nevada System may provide space for an office and the University of Nevada may employ necessary supplies and the State Climatologist as a member of the teaching staff. Also, the State Climatologist shall maintain descriptions of and information on the climate of Nevada and publish the findings concerning the climate at least four times a year. In reality the monthly climate summary has continued under State Climatologist John James and his successor and is available online at <http://www.climate.unr.edu/>.

Records 1877-1979 98 volumes and 81 cubic feet of paper files

U.S. Weather Bureau (USWB) Records 1897-1948

Climate and Crop Service, Nevada section Monthly Bulletins, 1897-1909, 1925-48.

Reno Weather Station 1905-1970

Monthly record of observations, 1905-1915, 1917-1948. USWB Forms 1001, 1002, 1014.
Climatological record monthly compilations, 1888-1930.
Memoranda, 1905-1916, 1937-42.
Hubbard Field, record of business and personnel, 1931-48.
Substation salaries, 1920-70.

Carson City Weather Station 1881-1905

Meteorological reports of Charles Friend from the Carson City weather station, 1881-95.
Monthly record of observations, 1892-1904 USWB Forms 1001, 1002.
Daily journal, 1887-1906.
Designated forms and annual and tabulated, reports 1899-1905.
Climatological record monthly compilations, 1888-1905.
Means book monthly compilations, 1887-1905.

Other Weather Stations 1888-1972

Elko weather station voluntary observers' meteorological records, 1888-1950.
Meteorological observations from closed stations, 1908-62.
USWB meteorological observations statewide weather stations, 1888-1972.

U.S. War Department, Signal Service 1887-1892

Forms 113, 101 Monthly meteorological reports at the Carson City weather station, 1887-92

Paper Files 81 cubic feet 1877-1979

These records contain voluntary meteorological observations, 1877-1979, from all Nevada weather stations statewide, arranged alphabetically. Some stations in communities lasted only a few months and some cover many decades.